Example of Work it Across for a Math Standard

Standard: <u>Mathematics Standard 6.</u> <u>The student will demonstrate through the mathematical processes an understanding of the relationships between two variables within one population or sample.</u>

Essence of the Standard (Expanded Standard): Collect information and summarize in chart/ graph.

| Grade Level | • | | | |
|---------------------------------|---|---|--|--|
| 5 th Grade | On Grade Level Expectation (Not adapted) | Abstract Symbolic | Concrete Symbolic | Beginning Symbol Use |
| Teaching Activity | Students have projects to design investigation & summarize outcome (simple survey research) | Create and implement a survey; summarize outcome using choice of plot or bar graph | Make choices to help in creating and implement of survey (e.g., who to survey, what to ask); administer (may use AT); choose between picture or symbol graph | Make choices to help create survey; use AT to help administer questions; summarize each response as received using choice of picture or symbol |
| How Student Shows Mastery | Design a mathematical investigation and analyze data using mathematical computations. | Compose overall survey question. Uses words and/or picture symbols to create survey questions (e.g., who, what, when, etc); use graph of choice to answer prediction and comparative questions. | Uses selection response to identify 3 or more key survey questions; administer with AT; tally responses onto bar graph (or other format) use graph to indicate which is more/less. | Use selection to make at least one choice about survey (e.g., who- boys or girls); administer by independently activating AT or passing out paper; summarize response as received using concrete manipulatives (e.g., object graph); place "more" symbol on appropriate column of graph. |